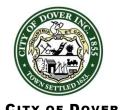
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1. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising the chapter as a whole by replacing any instance of the term "these regulations" with "This Chapter"

#### **AND**

Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising the chapter as a whole by replacing any instance of the term "Schedule of Fees" with "Fee Schedule"

#### AND

Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising the chapter as a whole by replacing any instance of the term "STORM WATER" with "STORMWATER"

- 2. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by deleting 149-4 "Applicability", Section A, as follows:
  - "(A) New construction **DEVELOPMENT** or **REDEVELOPMENT**. Site Review and Planning Board approval will be required for development of land for:
    - (1) Non-residential USES;
    - (2) Multi-family dwellings of five (5) or more units; and;
    - (3) Construction of parking areas larger than 4,000 square feet.
    - (4) Construction activities that result in a land disturbance of greater than or equal to one acre or less than one acre if part of a larger common PLAN of development that would disturb one acre or more.
    - (5) Any construction activities that require a conditional use permit for work to be located in or within fifty feet of a wetland or Conservation District."
- 3. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by deleting 149-4 "Applicability", Sections B, as follows:
  - "B. Expansions and/or additions. Technical Review Committee review will be required for the following expansion and/or additions to existing development:
    - (1) Any increase of NONRESIDENTIAL development resulting in an expansion of gross floor area exceeding twenty-five hundred (2,500) square feet.

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(2) Any addition to a residential structure resulting in the creation of five (5) or more additional units.

- (3) Any accessory structures with floor areas exceeding fifteen hundred (1,500) square feet.
- (4) Any expansion of a parking area or paving of a gravel parking area larger than one thousand (1,000) square feet.
- (5) Any construction activities that result in a **CONTIGUOUS LAND DISTURBANCE** land disturbance of greater than or equal to one acre twenty thousand (20,000) square feet, or less than one acre if part of a larger common PLAN of development that would disturb one acre or more.
- (6) Any construction activities that result in a **CONTIGUOUS LAND DISTURBANCE** land disturbance of greater than or equal to one thousand (1,000) square feet if the activity is located in or within fifty (50) feet of a wetland or Conservation District."
- 4. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-6 "Application Requirements", Section B(5), to read as follows:
  - "(5) Include one electronic and fifteen (15) copies of the SITE DEVELOPMENT PLAN as more fully described in Article IV of this Chapter. **Transmit a PDF of the SITE DEVELOPMENT PLAN via e-mail to dover-planning@dover.nh.gov.** (Note: Only six (6) copies of the preliminary PLAN need to be submitted initially for review by the Technical Review Committee. However, fifteen (15) copies are required for submission of the complete application to the Planning Board)."
- 5. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-9 "Expiration of Planning Board Approval", Section C, to read as follows:
  - "C. Approved site plans shall be protected from future amendments in regulations and ordinances in accordance with RSA 674:39. In order to be protected under RSA 674:39, the owner shall have completed active and substantial development, which is defined as the construction of basic infrastructure to support the development, including foundation walls and footings, driveway and parking lot construction to a minimum of gravel base, utilities placed in underground conduits, construction of all drainage improvements, and installation of all EROSION and SEDIMENT control measures. Substantial completion shall be deemed to have occurred when a CERTIFICATE OF OCCUPANCY for all buildings shown on the approved site PLAN has been issued by the Building Official, defined as the completion of all on-site-any parking lot improvements have been

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completed, and off-site improvements specified in the site PLAN approval have been completed or a surety has been provided to the City to insure completion of all unfinished off-site improvements."

- 6. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-10 "Construction of improvements; CERTIFICATE OF OCCUPANCY", Section B(2), to read as follows:
  - "(2) A final CERTIFICATE OF OCCUPANCY shall be issued, provided that all **on-site and off-site improvements required by the approved site plan** required roads and utilities
    servicing the subject parcel have been constructed and/or installed in accordance with city
    specifications."
- 7. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-10 "Construction of improvements; CERTIFICATE OF OCCUPANCY", Sections F (2) & (3), to read as follows:
  - "(2) The APPLICANT shall hold a neighborhood meeting to review the blasting plan and preblast survey, with representatives of the Fire and Rescue and the blasting company in attendance, prior to any on-site blasting. ABUTTERS within one thousand (1,000) feet of the external boundary of the project parcel shall be notified by certified mail (paid for by the APPLICANT) of the meeting no less than ten (10) days and no more than fifteen (15) days prior to the meeting. The notice shall state the time and date of the blasting, and contain a map showing the blast area, the one thousand feet (1000') radius area, and five hundred feet (500') radius area.
  - (3) Permit holders shall be in compliance with NFPA 495, The Code for the Manufacture, Transportation, Storage, and Use of Explosive Materials, in addition to all other ordinances and codes set forth in the City of Dover Site Regulations 149.14A STORMWATER Management, EROSION Control, and Flood Hazards and City of Dover Fire Prevention Code, which specifically prohibits the overnight storage of explosives or blasting agents. Further all storage magazines shall be locked in the open position at the end of the days' operation, for easy inspection by City Officials."
- 8. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-13 "SITE DEVELOPMENT PLAN", Section A(1), to read as follows:
  - "(1) A small-scale location map delineating the project site and its relation to the surrounding area **at an appropriate scale** within a radius of three thousand (3,000) feet."

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9. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-13 "SITE DEVELOPMENT PLAN", Section A(5), to read as follows:

- "(5) Location of all existing and proposed buildings and structures on the site. **Any details on detail sheets shall be numbered or lettered.**"
- 10. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-13 "SITE DEVELOPMENT PLAN", Section A(16), to read as follows:
  - "(16) A neighborhood PLAN **on an aerial photograph**, showing all property lines within a distance determined by the Director of Planning and Community Development during initial consultations, and how the project relates to abutting USES. This sheet should show the proposed impervious surfaces, and zoning boundaries."
- 11. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-14 "Site Development Design Criteria", Section A to read as follows:
  - "A. STORM WATER STORMWATER Management, EROSION Control, and Flood Hazards
    - (1) Purpose

The following are the purposes of these regulations:

- (a) To treat STORM WATER to maintain and protect the quality of receiving waters;
- (b) To reduce the DISCHARGE of pollutants;
- (c) To promote the implementation of Low Impact Development practices;
- (d) To minimize the amount of site disturbance and retain existing vegetation to the extent possible;
- (e) To maintain the natural hydrology of a site to the extent possible;
- (f) To promote the use of nontraditional and nonstructural STORM WATER management measures;
- (g) To promote STORM WATER management systems that require lower maintenance;

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(h) To encourage designs that allow for the containment in the event of a spill;

- (i) To promote a balance between pre development and post development flow and volume:
- (j) To properly pre-treat all STORM WATER RUNOFF;
- (k) To promote designs that maintain groundwater recharge volumes;
- (1) To address salt and sand loading
- (2) STORM WATER Management

STORM WATER management shall comply with the standards contained in Chapter 155 – Land Subdivision Regulations, Section 155–35 B, as amended.

(3) STORM WATER Management System Operation and Maintenance Plans

STORM WATER management system operation and maintenance plans shall comply with the standards contained in Chapter 155 — Land Subdivision Regulations, Section 155–35 C, as amended.

(4) EROSION and Sedimentation Control

EROSION and sedimentation control measures shall comply with the standards contained in Chapter 155 — Land Subdivision Regulations, Section 155–35 D, as amended.

(5) Flood Hazards

Any site PLAN proposed within the federally designated special flood hazard areas, as shown on the Flood Insurance Rate Maps dated May 17, 2005, as amended, shall comply with Chapter 113 of the City of Dover Code, entitled Floodplain Development Ordinance.

(1) Purpose and Objective

These regulations establish standards to manage the DISCHARGE of RUNOFF to the City of Dover's municipal storm sewer system and water bodies, in a manner compliant with the requirements of State and Federal law,

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including provisions of the Federal Stormwater Management Legislation for MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4), as amended.

These provisions and standards are implemented for the purpose of:

- (a) Managing STORMWATER RUNOFF to protect water quality and quantity;
- (b) Minimizing the contribution of a POLLUTANT for which a water body is IMPAIRED to the MAXIMUM EXTENT PRACTICABLE (MEP);
- (c) Causing no DISCHARGE of RUNOFF to an adjacent property in excess of RUNOFF DISCHARGE in the existing DEVELOPED or undeveloped condition;
- (d) Encouraging the use of LOW IMPACT DEVELOPMENT (LID) strategies.
- (2) Applicability of the STORMWATER Standards
  - (a) All projects requiring Site Plan or Major Subdivision approval, shall be subject to the following set of STORMWATER standards according to the amount and type of disturbance. Applicability is as follows:
    - (i) The minimum protections and management standards shall apply to all projects.
    - (ii) The STORMWATER management for new DEVELOPMENT standards shall apply to any project that results in a CONTIGUOUS LAND DISTURBANCE more than twenty thousand (20,000) square feet or creates more than four thousand (4,000) square feet of new IMPERVIOUS area.
    - (iii) The STORMWATER management for REDEVELOPMENT standards shall apply to any project that results in a CONTIGUOUS LAND DISTURBANCE of more than twenty thousand (20,000) square feet or creates more than four thousand (4,000) square feet of new IMPERVIOUS area where the existing land use has been previously DEVELOPED as commercial, industrial, institutional, governmental, recreational, or multifamily.
  - (b) All projects of such magnitude as to require a permit from the NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) program or the New Hampshire Department of Environmental Services (NHDES) ALTERATION OF TERRAIN (AoT) program shall also comply

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with the standards of the Environmental Protection Agency (EPA) and or NHDES permits and this section, whereas the stricter standards shall apply.

#### (3) Design Standards

- (a) Minimum Protections and Management Standards:
  - (i) Where applicable, all DEVELOPMENT must comply with the EPA Phase II Stormwater Rules and the City's MS4 Permit as amended.
  - (ii) Existing surface waters, including ponds, rivers, perennial and intermittent streams (natural or channelized), and wetland (including vernal pools) shall be protected by the minimum buffer setback as specified in Chapter 170-27. STORMWATER and EROSION and SEDIMENT control BEST MANAGEMENT PRACTICES (BMP's) shall be located outside the specified buffer zone unless otherwise approved by the Planning BOARD.
  - (iii) LOW IMPACT DEVELOPMENT (LID) site planning and design strategies shall be used to the MEP in order to reduce the generation of the STORMWATER RUNOFF volume for both new and REDEVELOPMENT projects. An owner/APPLICANT must document why LID strategies are not appropriate if not used to manage STORMWATER.
  - (iv) All proposed STORMWATER practices and measures shall be installed and maintained in accordance with manufacturers' specifications and performance specifications outlined in the NH Stormwater Management Manual Volume 2 (December 2008 or current revision) a copy of which can be found on the NHDES website.
  - (v) All storage facilities for fuel, chemicals, chemical or industrial wastes, and biodegradable raw materials shall meet the regulations of the NHDES including but not limited to those involving underground storage tanks, above ground storage tanks, hazardous waste and BEST MANAGEMENT PRACTICES for Groundwater Protection (ENV-Wa 401)
  - (vi) Salt and other de-icing materials shall be stored under cover or located such that no direct DISCHARGEs to receiving waters are possible.

    Snow storage areas shall be located such that no direct DISCHARGEs

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to receiving waters are possible. See NHDES guidance fact sheet on road salt and snow disposal.

- (vii) The use of sodium chloride-based materials for winter maintenance shall be the minimum necessary for safety. The use of sodium chloride-based materials is discouraged within the groundwater protection districts.
- (viii) IMPERVIOUS surfaces for parking areas and roads shall be minimized to the extent possible.
- (ix) STORMWATER RUNOFF from new IMPERVIOUS surfaces shall be directed to a BEST MANAGEMENT PRACTICE for flow MITIGATION, treatment and/or INFILTRATION.
- (b) STORMWATER Management for New DEVELOPMENT:
  - (i) RUNOFF of IMPERVIOUS surfaces shall be treated to provide eighty percent (80%) removal of TOTAL SUSPENDED SOLIDS (TSS), and fifty percent (50%) removal of both total nitrogen and phosphorous. Removal rates shall be determined using approved manufacturers POLLUTANT removal efficiency analysis or the POLLUTANT removal efficacies outlined in the NH Stormwater Management Manual Volume 1 Appendix E (December 2008 or current revision) a copy of which is available from the NHDES website.
  - (ii) Rainfall amount shall be based on current Extreme Precipitation Estimates obtained from the Northeast Regional Climate Center.
  - (iii)Measures shall be taken to control the post-DEVELOPMENT peak rate RUNOFF so that it does not exceed pre-DEVELOPMENT RUNOFF for the 2-year, 10-year, 25-year, 50-year, 24-hour storm events.
  - (iv) Measures shall be taken to control the post-DEVELOPMENT surface water RUNOFF volume so that it does not exceed pre-DEVELOPMENT RUNOFF for the 2-year, 10-year, 25-year, 50-year, 24-hour storm events. For sites where INFILTRATION/recharge is limited or not practicable, the owner/APPLICANT must demonstrate that the project will not cause or contribute to flooding or functional impairments to streets, adjacent properties, and downstream properties.



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(v) INFILTRATION rates for designing groundwater recharge practices shall be determined in accordance with Env-Wq 1504.14.

- (vi)STORMWATER conveyance practices shall be sized appropriately to convey the 10-year, 24- hour storm event without overtopping or causing flooding on the property.
- (vii) For large projects adding greater than or equal to ten (10) acres of IMPERVIOUS cover, or projects located in known areas of flooding concern, or specifically within areas with a one-percent chance of being inundated by water in any given year, the owner/APPLICANT shall submit a supplementary report that describes how the project will not increase the future flooding potential and complies with the AoT requirements pertaining to floodplain impacts as described in Env-Wq 1503.09, regardless of whether an AoT permit is required.
- (viii) The design of the STORMWATER management systems shall take into account upstream and up gradient RUNOFF that flows onto, over, or through the site to be DEVELOPED or REDEVELOPED, and provide for this contribution of RUNOFF.
- (ix) Seasonal high WATER TABLE elevations must be accounted for in all BMP design criteria.
- (x) Access for maintenance of STORMWATER facilities must be included as part of the design, where necessary. Access easements may be required.
- (xi) Plantings in treatment areas shall be native grasses, shrubs and/or other native plants in sufficient numbers and density to prevent soil EROSION and to achieve water quality treatment.
- (c) STORMWATER Management for REDEVELOPMENT:

In order to determine the STORMWATER requirements for REDEVELOPMENT projects, the percentage of the site covered by existing IMPERVIOUS areas must be calculated. STORMWATER requirements for REDEVELOPMENT will vary based upon the amount of site surface area that is covered by existing IMPERVIOUS surfaces.

(i) For sites meeting the definition of a REDEVELOPMENT project and having less than forty percent (40%) existing IMPERVIOUS surface coverage, the STORMWATER management requirements will be the

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same as new DEVELOPMENT projects with the important distinction that the APPLICANT can meet those requirements either on-site or at an approved off-site location (i.e., off-site MITIGATION). The APPLICANT must satisfactorily demonstrate that IMPERVIOUS area reduction, LID strategies and BMPs have been implemented on-site to the MEP.

- (ii) For sites meeting the definition of a REDEVELOPMENT project and having more than forty percent (40%) existing IMPERVIOUS surface coverage, STORMWATER shall be managed in accordance with one or more of the following techniques, listed in order of preference:
  - a. Implement measures onsite that result in MITIGATION and treatment of at least thirty percent (30%) of the existing IMPERVIOUS cover as well as fifty percent (50%) of the additional proposed IMPERVIOUS surfaces and pavement areas through the application of LID; or
  - b. Implement other LID techniques onsite to the MEP to provide MITIGATION and treatment for at least fifty percent (50%) of the entire site area.
- (iii) The owner/APPLICANT may utilize off-site MITIGATION to meet the REDEVELOPMENT requirements when the following standards have been met:
  - a. The owner/APPLICANT shall demonstrate, to the satisfaction of the Planning BOARD, that on-site treatment has been implemented to the MEP.
  - b. The owner/APPLICANT shall find an approved, off-site location, within the same WATERSHED as the project site, or within the drainage area of the same receiving waterbody.
  - c. Off-site MITIGATION shall be equivalent to no less than the total area of IMPERVIOUS cover not treated on-site.
  - d. The owner/APPLICANT shall submit a full design of the proposed off-site measures for review and approval.
  - e. The owner/APPLICANT must also demonstrate that there is no downstream drainage or flooding impacts as a result of not providing on-site management.

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#### (d) EROSION Control Standards During Construction:

The following standards shall be applied in project planning and shall be implemented prior to and during construction activity:

- (i) All proposed measures shall meet at a minimum the design standards for BEST MANAGEMENT PRACTICES set forth in the NH Stormwater Management Manual Volume 3 (December 2008 or current revision) a copy of which is available from the NHDES website.
- (ii) When a project requires a STORMWATER permit from the EPA Construction General Permit (CGP) program, copies of the STORMWATER POLLUTION PREVENTION PLAN (SWPPP) inspections shall be provided to the Community Services Department.
- (iii)Stripping of vegetation shall be done in a manner that minimizes soil EROSION. Whenever practical, natural vegetation shall be retained, protected, or supplemented.
- (iv) The area of LAND DISTURBANCE shall be kept to a minimum and be limited to an area only large enough to accommodate construction activities for a particular construction phase.
- (v) Off-site surface water and RUNOFF from undisturbed areas shall be diverted away from DISTURBED AREAs where feasible or measures to convey STORMWATER through the PROJECT AREA without causing EROSION of SEDIMENT must be included. Integrity of downstream drainage systems shall be maintained.
- (vi)Appropriate EROSION and SEDIMENT control measures shall be installed prior to any soil LAND DISTURBANCE and must be reviewed and approved by the Community Services Department.
- (vii) Perimeter site controls shall not be placed within wetland areas, stream channels or wetland buffers.
- (viii) Disturbed soil areas shall be either temporarily or permanently STABILIZED. In areas where final grading has not occurred, temporary stabilization measures should be in place within seven (7) calendar days for exposed soil areas that are within one hundred (100) feet of a surface water body or a wetland and no more than fourteen (14) calendar days for all other areas. Permanent stabilization should

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be in place within three (3) calendar days following completion of final grading of exposed soil areas.

- (ix) All temporary EROSION and SEDIMENT control measures shall be maintained in functioning condition until final site stabilization is accomplished. A proposed BMP inspection schedule shall be included in the submittal.
- (x) Additional temporary stabilization for the winter season consistent with NHDES guidelines shall be in place for DISTURBED AREAS that are not permanently STABILIZED by October 1st, or at the discretion of the Community Services Department.
- (xi) Special stabilization details shall be provided with the submission for any LAND DISTURBANCE on slopes equal to or steeper than 3:1.
- (xii) All temporary EROSION and SEDIMENT control measures shall be removed after final site stabilization. Trapped SEDIMENT and other disturbed soil areas resulting from the removal of temporary measures shall be permanently STABILIZED within thirty (30) calendar days unless conditions dictate otherwise.
- (xiii) For projects proposing to disturb and expose soils in areas of ten (10) acres or more at one time, a temporary (or permanent) SEDIMENT basin must be provided with storage for a calculated volume of RUNOFF from a drainage area from a 2-year, 24-hour storm, or equivalent control measures, where attainable, until final stabilization of the site. Alternatively, the SEDIMENT basin can be sized to provide thirty-six hundred (3,600) cubic feet of storage per acre of drainage area, until final stabilization of the site. In determining appropriate locations and number of SEDIMENT basin(s) needed, the operators may consider such factors as erodibility of site soils, slope lengths, available area on-site, construction period and other unique site considerations.
- (xiv) Use of temporary SEDIMENT basins should avoid any additional vegetation clearing or site LAND DISTURBANCE not otherwise needed for post-construction. SEDIMENT basin locations must be reviewed by the Community Services Department prior to construction and must consider the potential for offsite impacts including public safety, especially as it relates to SEDIMENT movement and/or SEDIMENT basin failure and alternative

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SEDIMENT controls must be used where site limitations preclude a safe design.

(e) Installation and Construction Inspections

The owner/APPLICANT shall be responsible for inspection requirements as follow:

- (i) The Community Services Department or their designated agent shall have access to the site to complete routine inspections.
- (ii) The Community Services Department shall be notified 24-hours prior to installation of a STORMWATER BMP in order to schedule an inspection. These inspections shall be completed during normal working hours.
- (iii) The Planning BOARD or Community Services Department may require the design engineer and/or an independent, third-party inspection and oversight of the construction of the STORMWATER management facilities and EROSION and SEDIMENT control at their discretion. Such oversight may be especially important for implementing techniques such as porous pavement or subsurface STORMWATER INFILTRATION systems. The owner/APPLICANT shall be responsible for all fees associated with third-party inspections.
- (iv) All SWPPP inspections must be conducted by a qualified professional such as a Professional Engineer (PE), a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Stormwater Inspector (CESSWI), or a Certified Professional in Stormwater Quality (CPSWQ). Inspection reports shall be submitted to the Community Services Department.
- (v) The owner is ultimately responsible for the installation, construction, inspection, and disposition of all STORMWATER management and EROSION control measures required by the provisions of these regulations.
- (f) STORMWATER MANAGEMENT PLAN (SWMP) Submittal Requirements

At the discretion of the Planning BOARD or Community Services Department, a technical review by an independent third party may be required of any SWMP prepared under these regulations. Such a review

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shall be performed by a qualified professional consultant and the expense of which shall be the full responsibility of the owner/APPLICANT.

- (i) For project requiring minimum protection standards, a plan including the following information shall be submitted:
  - a. Description of EROSION and SEDIMENT control measures as well as sequence for final stabilization of the project site.
  - b. Proposed changes in IMPERVIOUS cover areas and any changes in pre and post-DEVELOPMENT drainage patterns.
  - c. Description of LID proposed measures.
- (ii) For projects requiring New DEVELOPMENT or REDEVELOPMENT standards, a drainage report that contains the following items shall be submitted:
  - a. Description of construction period and earth movement schedule including anticipated project start and completion dates, sequence and duration of grading and construction activities, sequence and timing of installation and/or application of soil EROSION and SEDIMENT control measures as well as sequence for final stabilization of the project site.
  - b. Description of the onsite and adjacent wetlands, streams and other water resources including methods used to identify these resources and a description of any buffer setbacks that may apply, steep slopes, critical habitat, existing vegetation, areas with a one-percent chance of being inundated by water in any given year, and whether any downstream water bodies are listed as IMPAIRED according to NHDES' most recent 303(d) list.
  - c. Soils information for proposed disturbed areas shall be delineated by a Certified Soil Scientist. All other areas that contribute runoff to the project site, soil types may be identified in accordance with NRCS county-wide soil survey.
  - d. Description of existing drainage patterns, receiving water bodies or drainage infrastructure and soil types for recharge potential.



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e. WATERSHED area limits including any offsite and upstream areas contributing flow to shared drainage channels and/or infrastructure.

- f. Description of proposed changes in IMPERVIOUS cover areas and any changes in pre and post-DEVELOPMENT drainage patterns.
- g. Methods and assumptions used to calculate pre-and post-DEVELOPMENT RUNOFF volume, peak DISCHARGE, and DISCHARGE velocity for the specified design storm events.
- h. Methods and assumptions used to calculate the POLLUTANT LOAD removal.
- i. Description of LID measures that are proposed to limit the DEVELOPMENT footprint, preserve existing vegetation and mimic existing hydrology to the extent feasible.
- j. If not used, provide rationale why LID measures are not practical for the site.
- k. Describe measures and calculations for proposed practices used to achieve no net increase in RUNOFF volumes leaving the site.
- 1. Provide calculations for the INFILTRATION or exfiltration system.
- m. If an increase in post-DEVELOPMENT RUNOFF volume is anticipated due to limited applicability for LID measures and site constraints, provide an assessment and supporting calculations to demonstrate no adverse impacts to downstream infrastructure, adjacent properties or aquatic habitat.
- n. Descriptions, details, and design criteria and calculations for all structural, non-structural, permanent, and temporary EROSION and sedimentation control measures and BMPs. This information should include seeding mixtures and rates, types of sod, methods of seedbed preparation, expected seeding dates (or limitations on seeding timeframes), type and rate of lime and fertilizer application, and type and quantity of mulching for temporary and permanent control facilities.

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o. Where proposed changes are anticipated within mapped limits of the areas with a one-percent chance of being inundated by water in any given year, provide hydrologic and hydraulic analysis to show no net increase in flood elevations.

- p. Proposed schedule for the inspection and maintenance of all EROSION control measures onsite prior to achieving final site stabilization.
- q. Describe procedures for removing temporary EROSION control measures and removal of accumulated SEDIMENT captured by such measures.
- r. Any other specific study, calculation, or investigation as requested by the City.
- s. Describe procedures to limit and/or optimize the use of deicing materials and minimize offsite increases in chloride levels in adjacent surface and ground water.
- t. Provide a maintenance and inspection plan for post-construction monitoring of STORMWATER BMPs to ensure long-term performance and functionality including details of who will be responsible for inspections and maintenance, proposed schedule, documentation, submittal procedures and contingency plans if future maintenance is required.
- u. Provide copies of pertinent State and Federal Permits.
- (g) Long Term Operation and Maintenance

The owner shall be responsible for continued inspection and maintenance requirements. An operation and maintenance manual shall be created with the following information:

- (i) The names of the responsible qualified professionals who will implement the required reporting, inspections, and maintenance activates.
- (ii) An inspection checklist, identifying item or BMP, inspection frequency, and components to be inspected. List shall clearly outline performance thresholds and triggers for maintenance.

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(iii)Snow and ice removal shall be performed by a contractor certified by the "Green SnoPro" program, or approved equivalent, following BEST MANAGEMENT PRACTICES for the application of deicing materials.

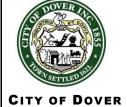
- (iv) Deicing log to track amount and type of deicing material applied.
- (v) A site plan clearly identifying the locations of all STORMWATER practices to be inspected and maintained.
- (vi) Inspection and maintenance log to be submitted to the City of Dover Community Services Department on an annual basis. Documents shall be submitted no later than December 15<sup>th</sup> of each year.
- (vii) The owner of record shall record at the Registry of Deeds documentation sufficient to provide notice to all persons that may acquire any property subject to the requirements and responsibilities described in the approved STORMWATER Management Plan. The notice shall comply with the applicable requirements for recording contained in RSA 477 and 478. The notice need not set forth the requirements at length, so long as it is sufficient to provide notice to prospective purchasers to the requirements for maintenance and reporting."
- 12. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by removing 149-14 "Site Development Design Criteria", Section D(6)(f) & (g):
  - (f) Where a proposed parking area exceeds three quarters (¾) of an acre, the APPLICANT shall document that they have investigated utilization of pervious materials to implement the parking area. The APPLICANT shall supply the documentation to the City Engineer to review and approve prior to TRC. Said documentation shall include, design conditions and other such variables to show that the use of pervious materials is prohibitive.
    - i. An APPLICANT that constructs a parking lot that exceeds an area three quarters (¾) of an acre with pervious materials shall be eligible for the Fast Track Review provisions outlined in 170-10.1 G). The design of the area shall meet or exceed standards developed and outlined in the New Hampshire Stormwater Manual.
  - (g) Where a proposed parking lot or other paved area meets or exceeds an area one and a half (1.5) acres, the APPLICANT shall design and construct the vehicle storage areas using pervious materials. The design of the area shall meet or exceed standards developed and outlined in the New Hampshire Stormwater

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Manual. The APPLICANT shall also be required to retain the design engineer as an inspector for the duration of construction of the parking area.

13. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-14 "Site Development Design Criteria", Section E "Outdoor Lighting", to revise Section 2(b) to read as follows:

	Zoning Districts – B- 3, B-4, B-5, I-1, I-2, I-4, and ETP	Zoning Districts – O, B-1, CBD, <b>H,</b> and CWD, <b>RCM</b>	Zoning Districts – RM-SU, and RM-U, LBW and HR
Mounting Height (Maximum)*	25 feet	20 feet	20 feet
Minimum	No less than 0.3	No less than 0.2	No less than 0.2
Illumination Level	FOOT-CANDLES	FOOT-CANDLES	FOOT-CANDLES
(at darkest spot of the	No more than 0.5	No more than 0.4	No more than 0.3
parking lot)	FOOT-CANDLES	FOOT-CANDLES	FOOT-CANDLES
Uniformity Ratio **	6:1	5:1	4:1

- 14. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-14.2 "Design Standards for Development in the Residential Commercial Mixed-USE (RCM) Overlay District", Section B(7)(h), to read as follows:
  - "(h) Deciduous trees shall be at least two-inch caliper measured four (4) **feet** inches above the ground except ornamental and flowering trees shall be at least one and one half inch caliper measured four (4) **feet** inches above the ground; multi-trunk trees shall have at least three (3) canes, and shall be six (6) inches measured four (4) **feet** inches above the ground, with a minimum height of five (5) feet."
- 15. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-14.2 "Design Standards for Development in the Residential Commercial Mixed-USE (RCM) Overlay District", Section D(5)(a)(ii), to read as follows:
  - "(ii) Deciduous trees shall be at least two-inch caliper measured four (4) **feet** inches above the ground, except ornamental and flowering trees shall be at least one and one half inch caliper measured four (4) **feet** inches above the ground,"
- 16. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-14.2 "Design Standards for Development in the Residential Commercial Mixed-USE (RCM) Overlay District", Section D(5)(a)(iv), to read as follows:

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"(iv) Multi-trunk trees shall have three (3) or more canes, and be six (6) inches measured four (4) **feet** inches above the ground, with a minimum height of five (5) feet."

- 17. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-14.2 "Design Standards for Development in the Residential Commercial Mixed-USE (RCM) Overlay District", Section D(5)(b)(ii), to read as follows:
  - "(ii) Deciduous trees shall be at least two (2) inch caliper measured four (4) **feet** inches above the ground except ornamental and flowering trees shall be at least one and one half inch caliper measured four (4) **feet** inches above the ground; multi-trunk trees shall be three (3) or more canes starting from the ground, six (6) inches measured four (4) **feet** inches above the ground, with a minimum height of five (5) feet."
- 18. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-15 "Physical Arrangements", Section C, to read as follows:
  - "C. All paving and/or storage shall not be permitted within five (5) feet of any side or rear property line, **except for a shared driveway or parking lot that straddles a common property line,** and no parking or paving, except for entrances/exits, shall be permitted within ten (10) feet of any front property line. These spaces shall be maintained as landscaped area."
- 19. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-15 "Physical Arrangements", Section E, to read as follows:
  - "E. Nonresidential uses that regularly receive or send out shipments of goods shall provide off-STREET loading spaces or loading docks on the same LOT as the use they are intended to serve. Loading facilities shall be designed to the rear or side of all proposed buildings. No loading space or dock shall be located within one hundred (100) feet of a residential district boundary, unless sufficient screening is provided to the satisfaction of the Planning Board. Loading facilities shall be designed in accordance with the rules and regulations of the Zoning Ordinance and shall be off-street or accessible via a public alley."
- 20. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-21 "Definitions", by inserting or revising the following definitions:

**"BEST MANAGEMENT PRACTICES (BMP)** means for <del>STORM WATER</del> **STORMWATER** management purposes, structural, nonstructural, and managerial techniques that are recognized to be the most effective and practical means to prevent or reduce nonpoint source <del>pollutants-</del>**POLLUTANTs** from entering receiving waters.

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CONTIGUOUS means any actual or proposed terrain LAND DISTURBANCE within five (5) years before the terrain alteration activity for which a permit is sought begins or within five (5) years after the terrain alteration activity ends shall be deemed part of the total project and included in the calculation of the amount of CONTIGUOUS area disturbed.

**DEVELOPMENT** means any construction or LAND DISTURBANCE or grading activities other than for agricultural and silvicultural practices.

DISTURBED AREA or LAND DISTURBANCE means an area where the natural vegetation or existing cover been removed, exposing the underlying soil and, therefore, is susceptible to EROSION.

EROSION means weathering of soil by running water, wind, or ice the detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

IMPAIRED means those water bodies not meeting water quality standards as identified by NHDES and listed as impaired and as Category 5 waters on their most current 303(d) list.

IMPERVIOUS means those surfaces that cannot effectively infiltrate rainfall consisting of surfaces such as building rooftops, pavement, sidewalks, driveways, compacted gravel.

INFILTRATION means the process of RUNOFF percolating into the ground (subsurface materials). INFILTRATION practices are STORMWATER treatment practices designed to capture STORMWATER RUNOFF and infiltrate it into the ground.

LOW IMPACT DEVELOPMENT (LID) means a site planning and design strategy intended to maintain or replicate pre-DEVELOPMENT hydrology through the use of site planning, source control, and small-scale practices integrated throughout the site to prevent, infiltrate and manage RUNOFF as close to its source as possible. Examples of LID strategies are pervious pavement, rain gardens, green roofs, bioretention basins and swales, filtration trenches, and other functionally similar BMPs located near the RUNOFF source.

MAXIMUM EXTENT PRACTICABLE (MEP) means the following: (1) all reasonable efforts have been made to meet the standard, (2) a complete evaluation of all possible management measures has been performed, and (3) if full compliance cannot be achieved, the highest practicable level of management is being implemented.

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MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) means the EPA's Small Municipal Separate Storm Sewer System (MS4) General Permit developed under the Clean Water Act. MS4 applies to municipalities that contain any portion of an urbanized area as defined by the Census. It applies to STORMWATER conveyances owned by a State, city, town, or other public entity that DISCHARGE to 'Waters of the United States'. The MS4 Permit requires operators of small MS4s to develop a STORMWATER Management Program that uses appropriate BEST MANAGEMENT PRACTICEs (BMPs) for six minimum control measures included in the MS4 permit.

NHDES ALTERATION OF TERRAIN (AoT) means the State permitting program applying to earth moving operations.

POLLUTANT means but is not limited to, SEDIMENT, TOTAL SUSPENDED SOLIDS (TSS), phosphorus, nitrogen, metals, pathogens, floatable debris, thermal impacts, and oil and other petroleum products.

POLLUTANT LOAD means an amount of a POLLUTANT that is introduced into a receiving water body measured in units of concentration or mass per time (i.e. concentration (mg/l) or mass (lbs/day)).

PROJECT AREA means the area within the subdivision or site plan boundaries plus any areas with associated off-site improvements.

REDEVELOPMENT means any construction, alteration, or improvement that disturbs area where the existing land use is commercial, industrial, institutional, governmental, recreational, or multifamily residential. Building demolition is included as an activity defined as "REDEVELOPMENT," but building renovation is not provided the footprint of the building or structure to be renovated is not altered or expanded and does not exceed fifty percent (50%) of the current assessed value. Similarly, removal of roadway materials down to the erodible soil surface is an activity defined as "REDEVELOPMENT," but simply resurfacing of a roadway surface is not. Any creation of new IMPERVIOUS area over currently pervious portions of the site will need to comply with new DEVELOPMENT requirements.

STABILIZED means when the soil EROSION rate approaches that of undisturbed soils. Soils which are disturbed will be considered protected when covered with a healthy, mature growth of grass, or a good covering of straw mulch or other equivalent (weed-free) mulch at a minimum rate of two (2) tons/acre with higher rates required for dormant periods. Mulch is only a temporary measure; ultimately, the site needs vegetation.

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**STORM WATER STORMWATER** means RUNOFF from a storm event, snowmelt RUNOFF, and surface RUNOFF and drainage.

STORMWATER MANAGEMENT PLAN (SWMP) means a plan that outlines project features, proposed temporary and permanent EROSION control features, maintenance schedules and practices, and design basis used to establish temporary and permanent STORMWATER design features.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) means a plan developed for a site or property that evaluates potential pollutant sources and designs and implements appropriate measures to prevent or control DISCHARGE of pollutants in STORM WATER RUNOFF. required by the Environmental Protection Agency (EPA) that clearly describes appropriate pollution control measures that include a description of all pollution control measures (i.e., BMPs) that will be implemented as part of the construction activity to control POLLUTANTs in STORMWATER DISCHARGEs and describes the interim and permanent stabilization practices for the site.

TOTAL SUSPENDED SOLIDS (TSS) means the total amount of a soils particulate matter which is suspended in the water column.

WATERSHED means all land and water area from which RUNOFF may run to a common (design) discharge point."

21. Chapter 149 of the Code of the City of Dover, entitled Site Review Regulations, is hereby amended by revising 149-21 "Definitions", by deleting the following definitions:

"AXONOMETRIC drawing means a drawing showing a building in three dimensions.

AWNING WINDOW means a single SASH window that opens outward from the top.

BARGEBOARD means a board, typically decorated, on the sloping edge of an overhanging GABLE roof.

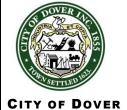
**BAY** means a vertical division of a building FACADE as delineated by some regular recurring feature such as windows or COLUMNS.

**BOARD** means the Planning Board of the City of Dover.

**BOND** means the pattern formed by bricks in a wall using one or more sides or positions (oblong or upright) of the brick.

**CANTILEVER** means a horizontal element projecting from a wall without external support.

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CAPITAL means the top portion of a COLUMN or PILASTER crowning the shaft.

**CASEMENT** means a single SASH window that opens outward from the side.

COLONNADE means a row of COLUMNS supporting a roof, arches, or an ENTABLATURE.

**DATE OF OFFICIAL SUBMISSION** means an application shall be considered officially submitted only at the regular meeting of the Planning Board following the completion of the appropriate procedure and the receipt of a written memorandum from the Director of Planning and Community Development certifying said application's technical review.

**DENTILS** means small, rectangular blocks arranged in a tooth-like series under an overhang.

**DOUBLE HUNG WINDOW** means a window with two vertical sliding SASHES, each closing half of the window opening

**ENGAGED COLUMN** means a COLUMN which is attached to a wall (rounded in cross section).

**FALSE FRONT** means a FACADE that extends well above the rest of the building, to give the impression that a building is larger than its actual size.

FINIAL means small vertical ornament at the top of a roof.

FRONTISPIECE means an ornamental portal around the entrance

GAMBREL means a roof form with a double sloped profile—a steep lower plane and a less steep upper plane (differs from a MANSARD in that a GAMBREL is two sided while a MANSARD is four sided; also the angle of the two planes on a MANSARD is closer to 90 degrees).

**HIERARCH** means the articulation of the importance of a form by its size, shape, or placement relative to the other related forms.

**HIPPED ROOF** means a roof, which slopes upward from all four sides of a building (it may have a RIDGE or end in a point).

**LOZENGE** means a diamond shaped ornament applied to a wall.

LUNETTE means a semicircular or half-moon window or other element on a FACADE.

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MASONRY means heavy materials including stone, brick, concrete, concrete block, and stucco.

MEDALLION means an ornamental plaque applied to a wall.

MODERN ARCHITECTURE means a style characterized by largely undecorated and simple building forms with relatively large windows and a horizontal emphasis.

**MOLDING** means architectural detailing applied around a window or door or to the surface of a wall.

NEOCLASSICAL means a formal style of design evoking ancient Greek or Roman architectural forms.

ORIEL WINDOW means a BAY WINDOW projecting from a buildings upper floor.

**PEDIMENT** means triangular front end of a roof, comparable to a GABLE except a PEDIMENT always has an articulated horizontal side.

**PERGOLA** means an unenclosed structure with an open wood framed roof, often latticed.

**PIAZZA** means an open space oriented to pedestrians, usually rectangular in shape, defined by a building or buildings on two or more sides.

**PORTHOLE WINDOW** means a circular window (also called a bull's eye window).

**SHED ROOF** means a roof composed simply of one sloping plane.

SILL means the horizontal bottom element of a window or door frame.

SITE DESIGN CRITERIA means Design and performance standards required under the provisions of 149-14.

**SOFFIT** means the underside of any building part, such as under an EAVE, ARCH, or LINTEL.

**STEEPLE** means the combined TOWER and spire of a church

**SYMMETRY** means the balanced distribution of equivalent forms and spaces about a common line (AXIS) or point.

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TURRET means a small, slender TOWER usually at the corner of a building.

VICTORIAN means term used to cover all of the various styles of architecture during the reign of Queen Victoria 1837 to 1901, including Second Empire, Italianate, Gothic Revival, COLONIAL Revival, Queen Anne, Renaissance Revival, and others. (Georgian, Federal, and Greek Revival styles predate the VICTORIAN era.)

**WATER TABLE** means a thickened and frequently adorned part of the foundation of a building originally designed to make the foundation less permeable to stormwater."

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